REMARKS

The Office Action mailed October 20, 2005 has been carefully considered.

Claims 1-15 are pending and stand rejected.

Claims 1, 4, 8, 11 and 15 have been amended. Claim 5-7 and 12-14 have been cancelled.

Claims 9-14 are objected to as the dependent claims are not of the same type as the independent claim from which they depend.

Applicant, through his attorney, thanks the Examiner for his observation and has amended the remaining aforementioned claims to be of the same type of the independent.

Having amended the claims as suggested, it is submitted that the reason for the rejection has been overcome. Applicant respectfully requests that the rejection be withdrawn.

Claims 1, 2, 4, 6, 8-9, 11, 13 and 15 stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting over claims 1-3, 10-12 and 19-21 of co-pending patent application serial no. 10/679,662 in view of US Patent no. 6,898,681 issued to Young.

Applicant respectfully disagrees with the reason for rejecting the claims. However, in the interest of advancing the prosecution of this matter, applicant respectfully requests that the provisional rejection of the claims under obviousness type double patenting be held in abeyance until such time as one of the referred-to patent applications issues and a comparison of the issued claims may be made.

Claims 4, 6, 11 and 13 stand rejected under 35 USC 112, second paragraph as being indefinite.

Applicant respectfully disagrees in part with the statements made in the Office Action. With regard to the term "extent of the clone," applicant, through his attorney, submits that the specification on page 9 describes "an extent [is] a number of contiguous data block on an LU that is represented by a specific amount of data, e.g., a bit in a map, e.g., a bitmap." One skilled in the art would understand that the term "extent of the clone" would describe "a number of contiguous data blocks" within the clone. Therefore, it is respectfully submitted that the

referred-to term is not indefinite as the terms "extent" and "clones" are clearly described in the written description of the instant patent application.

With regard to the term "may be" applicant disagrees with the remarks made in the Office Action but has amended the recited claims to contain the term "are" in place of "may be."

For at least these reasons applicant submits that the reason for the rejection has been overcome and respectfully requests that the rejection be withdrawn.

Claims 1-21 [15] stand rejected under 35 USC 102(e) as being anticipated by Young (USP no. 6,898,681).

Applicant respectfully disagrees with the reason for rejecting the claims.

Young discloses a system for providing a copy of data at a point in time that includes a data storage device including a master store arranged to store bocks of data, at least one subsidiary store to store point in time copy data having blocks of data copied from said master store at a particular point in time and a bitmap store associated with each of the subsidiary stores to store data indicating when a data block of the master store differs from a corresponding data block stored in the associated subsidiary store. (see Abstract).

The instant Office Action states that "the master store [of Young] or volume represents the first volume [in the instant application] and shadow store or volume [of Young] represents the clone volume recited in the claims." The instant Office Action further refers to col. 11, lines 8-22, of Young, for disclosing the claim element "if any extents affected by the host write request are involved in the restoration and preserving is not selected, then setting an indicator to indicate that the extents need to be re-copied."

A reading of the referred to section reveals that Young teaches "overwriting any data blocks of the shadow store with corresponding data blocks of the master store where the corresponding bit of the shadow bitmap is 1 indicating that the data has changed since the last point in time copy was produced."

Rather than teaching the element "restoring the source [first volume] by copying data content from the clone [second volume] to overwrite the data content of the source," and "setting an indicator to indicate that the extents need to be re-copied," Young teaches overwriting the shadow [second volume] with data blocks from the master [first volume] where the

corresponding bit of the shadow indicates that the data has changed. Hence, Young fails to teach restoring a master (source) from a clone (shadow) as is recited in claim 1, for example, and further fails to recite providing an "indicator to indicate that the extents need to be re-copied."

Even if the roles of the source and clone were reversed, i.e., restoring the master from the clone, Young fails to teach an indicator "to indicate that the extents need to be re-copied," as the bit map disclosed by Young discloses the data blocks that have to be copied and not re-copied.

It is well recognized that to constitute a rejection pursuant to 35 USC §102, i.e., anticipation, all material elements recited in a claim must be found in one unit of prior art.

Young cannot be said to anticipate the present invention, because Young fails to disclose each and every element recited.

At least for this reason, applicant submits that the rejection of claim 1 has been overcome and can no longer be sustained. Applicant respectfully requests withdrawal of the rejection and allowance of the claim.

With regard to the remaining independent claims, these claims recite subject matter similar to that recited in claim 1 and were rejected for the same reason used in rejecting claim 1. Thus, for the amendments made to these claims, which are similar to those made in claim 1 and for the remarks made in response to the rejection of claim 1, which are also applicable in response to the rejection of the remaining independent claims, and reasserted, as if in full, herein, it is submitted that the reason for rejecting these claims has been overcome and the rejection can no longer be sustained. It is respectfully requested that the rejection be withdrawn and the claims allowed.

With regard the remaining claims these claims ultimately depend from the independent claims, which have been shown to contain subject matter not disclosed by, and, hence, allowable over, the reference cited. Accordingly, these claims are also allowable by virtue of their dependency from an allowable base claim.

Accordingly, it is respectfully requested that the rejection be withdrawn and the claims allowed.

In view of the foregoing, the applicant believes that the application is in condition for allowance and respectfully request favorable reconsideration.
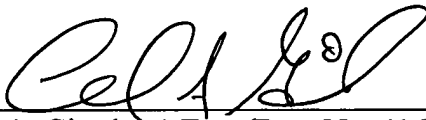
In the event the Examiner deems personal contact desirable in the disposition of this case, the Examiner is invited to call the undersigned attorney at the telephone number indicated below.

A petition for a one-month extension and authorization to charge the appropriate fee for the filing of this Amendment and Response is attached hereto. No other fees are believed necessary. However, if any other fees are necessary, please charge all fees occasioned by this submission to Deposit Account No. 05-0889.

Respectfully submitted,

Dated: __1/26/2006__

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